

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
UTILITY PATENT APPLICATION TRANSMITTAL

FIRST NAMED INVENTOR OR APPLICATION IDENTIFIER: **Dwight Warkentin**  
TITLE: **MECHANICALLY-BASED INTERVAL OPTIMIZATION FOR A BIVENTRICULAR PACING ENGINE**

CERTIFICATE UNDER 37 CFR §1.10: I hereby certify that this Utility Patent Application Transmittal and the documents referred to as enclosed therein are being deposited with the United States Postal Service, in an envelope addressed to: Box Patent Application, Commissioner of Patents, Washington, D.C. 20231, "EXPRESS No. EV 331 792 563 US, on this 29th day of July, 2003.



Commissioner for Patents  
BOX PATENT APPLICATION  
Washington, D.C. 20231

Paul H. McDowall  
Printed Name  
Signature

Sir:

We are transmitting herewith the attached:

- X Patent Application Transmittal  
X Specification:  
Total pages: 26 (including claims and abstract: Spec. 21 sheets; Claims 4 sheets; Abstract 1  
X Drawings:

Total sheets: 6  
☐ formal ☒ informal

- ☒ Combined Declaration and Power of Attorney:  
☒ executed  
☐ copy from prior application  
☐ Deletion of Inventor(s) - Signed statement attached deleting inventor(s) named in the prior application (37 CFR 1.63(d)(2) and 1.33(b)  
☐ Incorporation by Reference - The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied above is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

- X Accompanying application parts:  
☐ Notification of filing a  
☒ Assignment of the Invention to Medtronic, Inc.  
☒ Assignment cover sheet  
☐ Information Disclosure Statement  
☐ PTO Form 1449  
☐ Copies of IDS citations  
☐ Preliminary Amendment  
☐ A copy of the Petition or Conditional Petition for Extension of Time in the prior application.  
X Return Postcard

IF A CONTINUING APPLICATION:

- ☐ Continuation No. ☐ Divisional ☐ Continuation-in-part (CIP) of prior application
- ☐ Amend the specification by inserting before the first line the sentence: --This application is a of application Serial No. , filed , now allowed.--
- ☐ Cancel in this application original claims \_\_\_\_ of the prior application before calculating the filing fee. (At least the original independent claim must be retained for filing purposes.)
- ☐ The prior application is assigned of record to Medtronic, Inc.
- ☐ The Power of Attorney in the prior application is to: \_\_.

11324 U.S. P.T.  
07/29/03

☐ This application claims the benefit of U.S. Provisional Application(s) Serial No.(s) \_\_\_\_\_, filed \_\_\_\_\_.

X Address all future correspondence to: Paul H. McDowall, Reg. No. 34,873  
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27581

FEE CALCULATION	No. of Claims Filed	Claims Included in Base Fee	No. of Extra Claims	Rate	Fee
Total Claims	20	20	= 0	x 18	\$ 0.00
Independent Claims	3	3	= 0	x 84	\$ 0.00
Multiple Dependent Claims			0	+ 280	
Basic Filing Fee					\$750.00
TOTAL					\$750.00

X Charge Deposit Account No. 13-2546 in the amount of **\$750.00** for the filing fee and \$40.00 assignment recordation fee.

X The Commissioner is hereby authorized to charge any fees which may be required under 37 CFR 1.16 and 1.17, or credit any overpayment to Deposit Account No. 13-2546. A duplicate of this transmittal is enclosed.

Date

29 July 03

Paul H. McDowall, Reg. No. 34,873  
Telephone: (763) 514-3351



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APPLICATION FOR UNITED STATES LETTERS PATENT

for

MECHANICALLY-BASED INTERVAL OPTIMIZATION FOR  
A BIVENTRICULAR PACING ENGINE

by

DWIGHT H. WARKENTIN

ATTORNEY OF RECORD:

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**CERTIFICATE OF "EXPRESS MAIL"**

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Date of Deposit: 29 July '03

I hereby certify that this paper or fee is being deposited with the United States Postal Service as "EXPRESS MAIL" POST OFFICE TO ADDRESSEE service under 37 CFR 1.10 on the date indicated above and is addressed to BOX PATENT APPLICATION, Commissioner of Patents and Trademarks, Washington, D.C. 20231.

PAUL H. MCDOWALL

Printed Name

Signature

P. H. McDowall